FIG.1

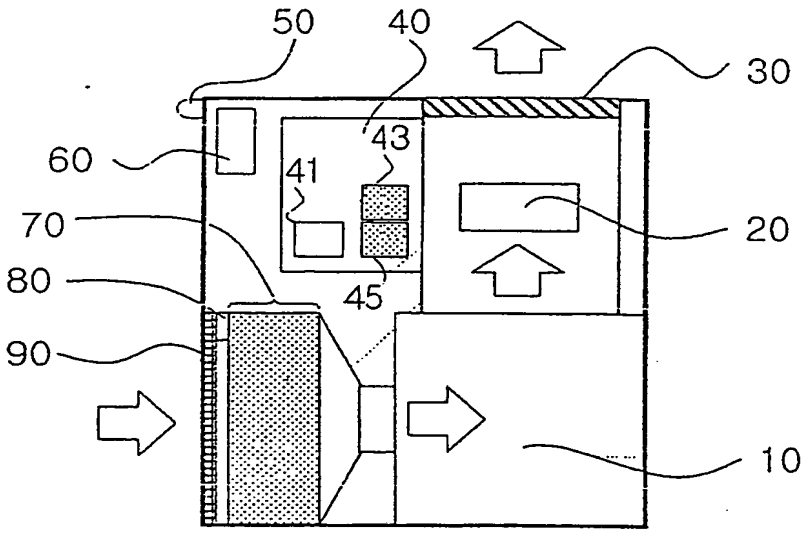


FIG.2a

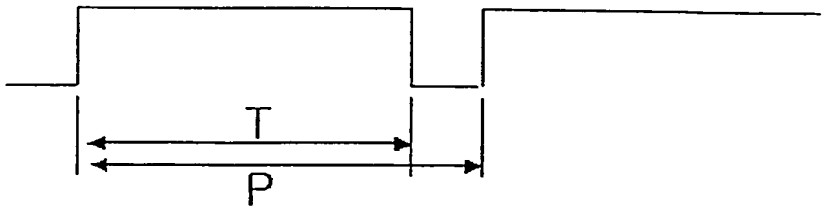


FIG.2b

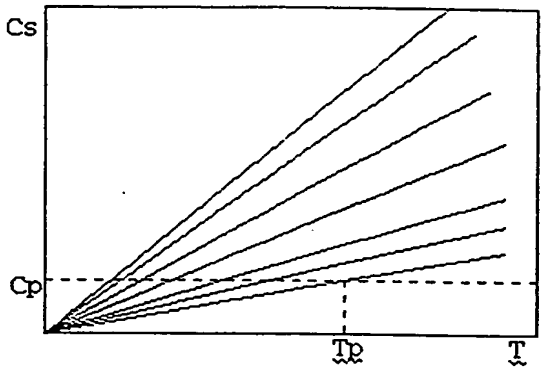


FIG.3

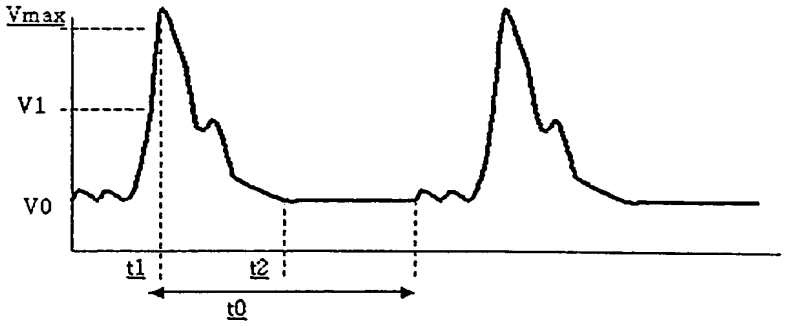


FIG.4

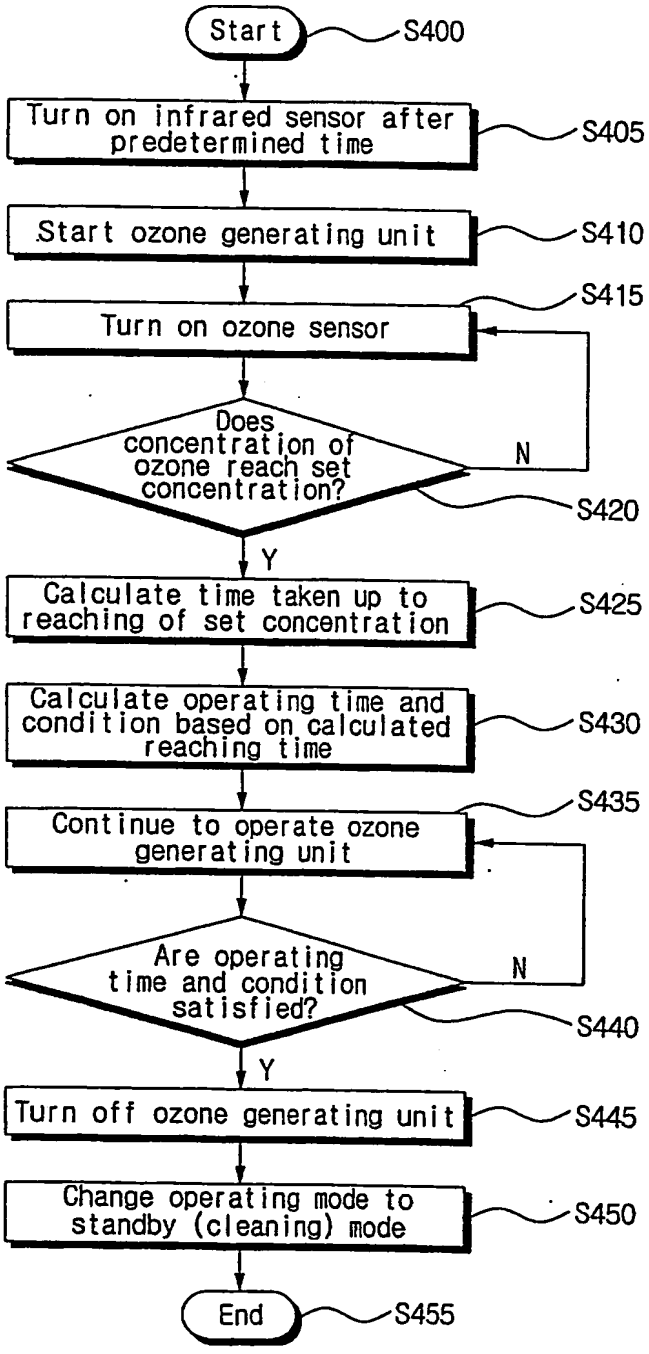

Start
S400
Turn on infrared sensor after predetermined time
S405
Start ozone generating unit
S410
Turn on ozone sensor
S415
Does concentration of ozone reach set concentration?
N
S420
Y
Calculate time taken up to reaching of set concentration
S425
Calculate operating time and condition based on calculated reaching time
S430
Continue to operate ozone generating unit
S435
Are operating time and condition satisfied?
N
S440
Y
Turn off ozone generating unit
S445
Change operating mode to standby (cleaning) mode
S450
End
S455

FIG.5

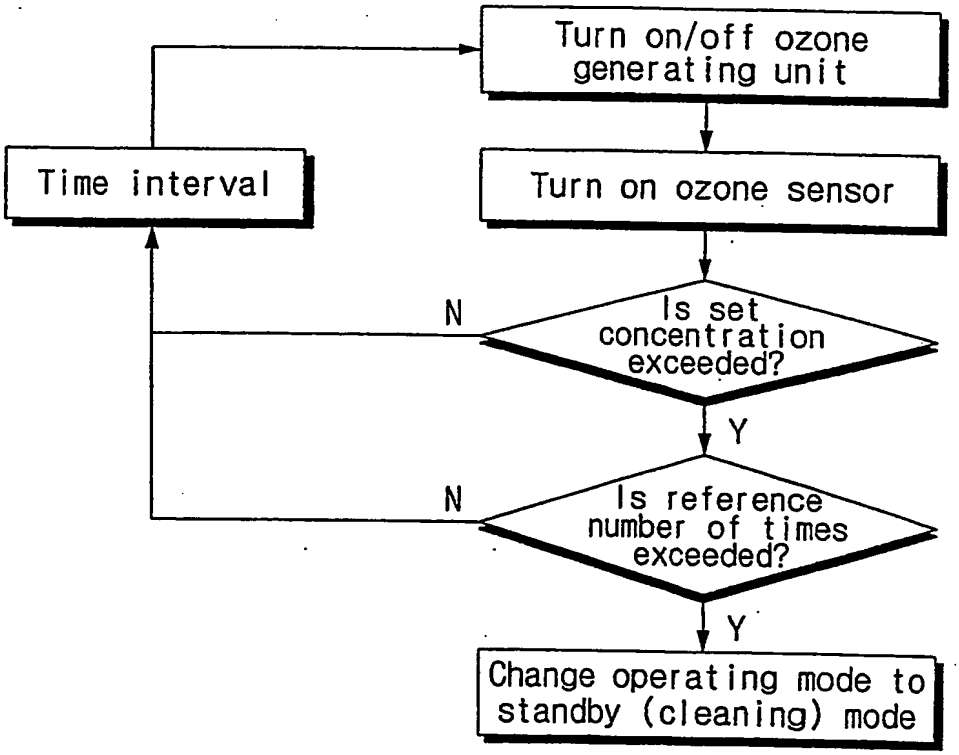
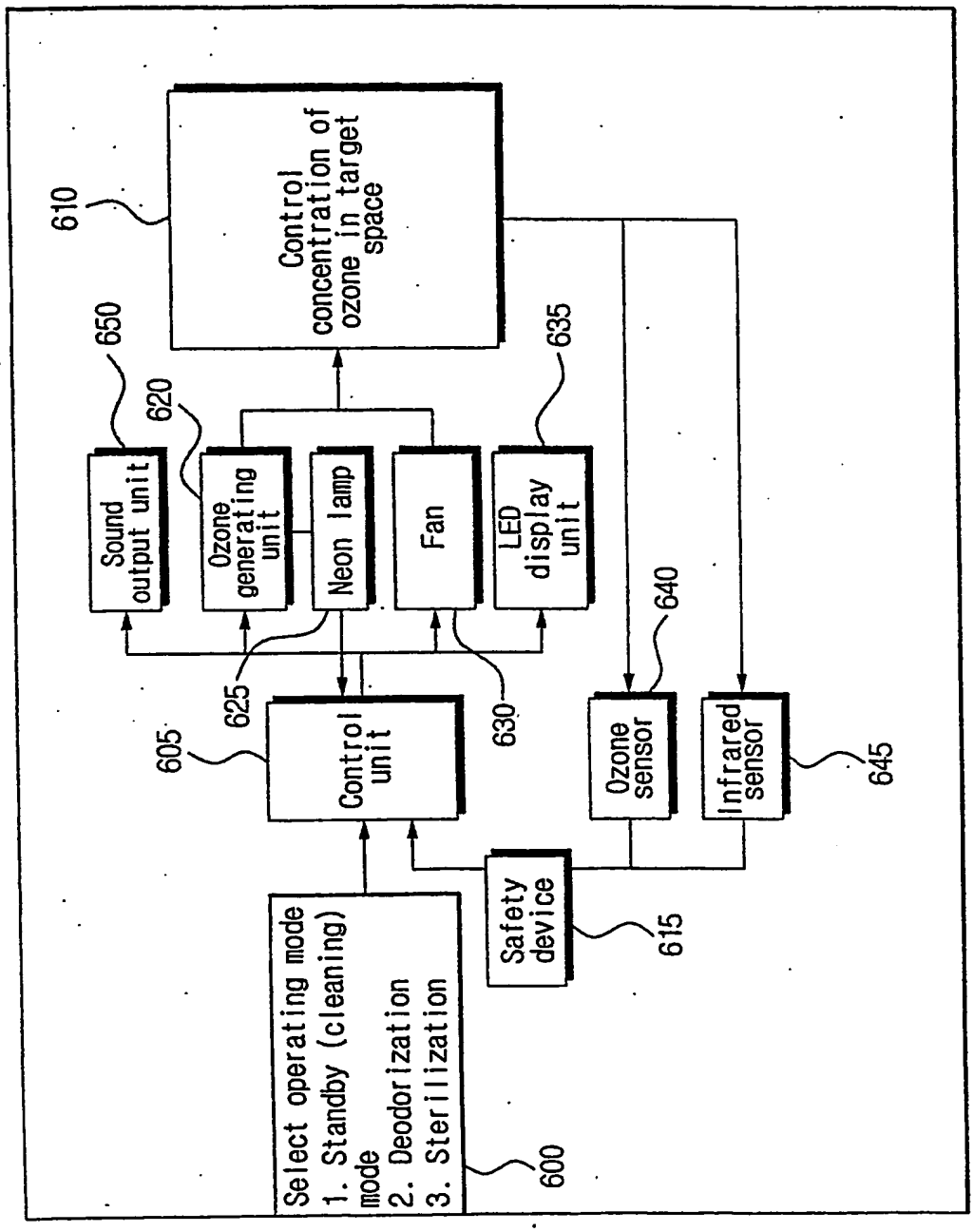

Turn on/off ozone generating unit
Turn on ozone sensor
Is set concentration exceeded?
N
Y
Is reference number of times exceeded?
N
Y
Change operating mode to standby (cleaning) mode
Time interval

FIG.6


610
Control concentration of ozone in target space
650
620
635
Sound output unit
Ozone generating unit
Neon lamp
Fan
LED display unit
640
625
630
605
Control unit
Ozone sensor
Infrared sensor
645
Safety device
615
Select operating mode
1. Standby (cleaning) mode
2. Deodorization
3. Sterilization
600